HI83141-1 · HI8314-1

Analog pH/mV Meters

- Automatic Temperature Compensation (ATC)
- Two-point Calibration
- Water-resistant
  - Compact, heavy-duty casing
- Battery indicator
  - Low battery indicator
- Auto shut-off

The HI83141-1 and HI8314-1 are portable pH/mV meters designed to be accurate, reliable and easy to use.

The HI8314-1 uses the HI1217-1 pre-amplified pH electrode with built-in internal temperature sensor.

The HI83141-1 uses the HI1230B pH electrode and HI7669-1 temperature probe using separate connections.

Manual calibration is performed at one or two points by adjusting the trimmers on the front panel. Capable of measuring pH/mV and temperature, these meters are great for field work, providing one meter for multiple uses.

This instrument is ideal for applications that require a custom calibration point. Manual calibration can be extremely useful in order to achieve better accuracy.

These instruments can also be used for ORP measurements with the optional probes below:

HI83141-1: **HI3131B**

HI8314-1: **HI3618D** or **HI4619D**





Specifications		HI83141-1	HI8314-1
pH*	Range	0.00 to 14.00 pH	0.00 to 14.00 pH
	Resolution	0.01 pH	0.01 pH
	Accuracy	±0.01 pH	±0.01 pH
	Calibration	manual, two-point, via trimmers	
	Temperature Compensation	automatic, 0 to 70°C (32 to 158 °F)	
mV	Range	±1999 mV	±1999 mV
	Resolution	1 mV	1 mV
	Accuracy	±1 mV	±1 mV
Temperature*	Range	0.0 to 100.0°C; 32.0 to 212.0°F	
	Resolution	0.1°C; 0.1°F	0.1°C; 0.1°F
	Accuracy	±0.4°C; ±0.8F (excluding probe error)	
Additional Specifications	pH Electrode	HI1230B PEI body pH electrode with BNC connector and 1 m (3.3') cable (included)	HI1217-1 PEI body, pre-amplified pH electrode with internal temperature sensor, DIN connector, and 1 m cable (included)
	Temperature Probe	HI7669-1 stainless steel temperature probe, BNC connector (included)	–
	Slope / Offset Calibration	from 80 to 110% / ±1 pH	
	Battery Type / Life	9V / approximately 450 hours of continuous use	
	Auto Shut-Off	after 8 minutes of non-use	
	Environment	0 to 50°C (32 to 122°F); RH max 95% non-condensing	
	Dimensions	145 x 80 x 36 mm (5.7 x 3.1 x 1.4")	
	Weight	230 g (8.1 oz.)	
Ordering Information	**HI83141-1** is supplied with HI1230B pH electrode and HI7669-1 temperature probe, HI70004 pH 4.01 buffer solution sachet, HI70007 pH 7.01 buffer solution sachet, HI700601 electrode cleaning solution sachets (2), calibration screwdriver, battery, protective case, and instructions. **HI8314-1** is supplied with HI1217-1 pH electrode, HI70004 pH 4.01 buffer solution sachet, HI70007 pH 7.01 buffer solution sachet, HI700601 electrode cleaning solution sachets (2), calibration screwdriver, battery, protective case, and instructions.		
Accessories	**HI710007** blue shockproof rubber boot		
	HI710008 orange shockproof rubber boot		

* Limits will be reduced to actual sensor limits

pH and ORP electrodes begin on page 2.144; pH and ORP solutions begin on page 2.164